##### [00:00:02.770] - Speaker 1

Welcome to this Community Viz Video Tutorial this tutorial will teach you about some advanced settings in the Buildout Wizard. In previous videos, we explored the options available in standard build out, walking through through the numeric, spatial and visual phases. Now we'll explore some more advanced options of the wizard which allow you to specify the interior contents of a given building. We'll begin as usual, by launching the build out wizard from the scenario 360 drop down tools. On the welcome screen there is a button which will unlock some new options for us. The Advanced Button when I click this button, you'll notice that my Navigator on the left expands to include additional screens. These additional screens include mixeduse buildings, building information, and spatial buildings. Each of these screens provide ways to identify how the internal contents of a building are determined. Let's go directly to our density rule screen to get started with exploring these advanced options. Up until now, we only had the option to incorporate mixed use on a given feature by allocating portions of the property to either residential or nonresidential use. This is sometimes called horizontal mixed use, and in previous videos we set up transit mixed use to allow for this in advanced mode.

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I now have this checkbox to indicate that in some land uses I want to have a mix of uses within buildings themselves. This is sometimes called vertical mixed use. To accommodate this, I need to make sure that any use where we will have mixed use buildings has a quantity specified under Floor area. Dwelling unit quantities are not necessary for vertical mixed use. Here, the Main Street use will be our focus and we've entered an Far of 1.0.

##### [00:01:49.670] - Speaker 2

Because I checked the box to allow. Mixed use buildings, I can now select to which uses this will apply.

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I locate Main Street in the list and check the box for contains mixed use buildings. Clicking next, I will get screens for each of the uses where I checked that box.

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Here is my form for my Main Street use designation. I can enter any uses up to five in the list. For building use. Each use must be assigned a percent of the floor area and all presents must add up to 100 before I'm done. Because I'm using floor area as the building quantity, residential uses must have an average floor area per dwelling unit. You can assign multiple unit sizes by including more than one residential use in the list. We've already entered information for the next two screens in previous runs, so I'm going to skip ahead on my Navigator to the Building Information screen. This form allows you to alter how Build Out determines the building count by divvying up the overall quantities for dwelling units and floor area. By default, Build Out treats dwelling units as single family homes, one unit per building and non residential floor area as one building per property containing the entire floor area. Potential for that property. Here you can specify how the quantities get distributed into structures. For my residential uses, I can set up buildings with multifamily more than one dwelling unit per building by entering quantities in the Du per building column.

##### [00:03:18.560] - Speaker 2

So if a property could have a total of 100 dwelling units, entering ten du per building would result in ten buildings. For my nonresidential and mixed use buildings, I can establish multiple structures by entering footprint sizes and floor heights. So if I have a potential for 1 million given property, entering 100 0 floors would result in five buildings on that property. Now that I've explored the advanced numeric options, I'm ready to look at the advanced options. Under the spatial phase. I will navigate directly to the screen called Spatial Buildings by clicking here. This screen allows me to determine the type of feature point or footprint I want to represent my buildings on the map. By default, under Standard build out, spatial buildings are points. If I choose footprint buildings will be created as square polygon shapes of the specified size. You'll notice all of my nonresidential and mixed use buildings inherited the footprint size from the building information we just entered. If I chose footprint for residential structures, I need to provide a size for those buildings here.

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I'm now ready to run my advanced options for build up. I'll click next and then finish. I can select all three phases to run. Since I've input everything between this session and previous sessions, I'll again choose to create a new scenario called Urban Fabric Advanced so we can compare the advanced results. You'll see now that I have squares on the map for my spatial buildings in the table of contents, these features exist in my build out grouping building Footprints layer. This layer attribute table looks identical to the buildings table in terms of attribute names. Whether or not there are records in the list is dependent on what I specified in Spatial Buildings point or footprint. To see how this compares with my last build out run, I can pull up my comparison window using the tools and compare scenarios. I'll set this to have two windows with my Urban Fabric Spatial Scenario on the left and my current Urban Fabric Advanced Scenario on the right. Notice the difference in the building features colored dots versus square polygons. You'll also notice that in my non residential and mixed use areas, the standard Spatial scenario only placed a single building.

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The Advanced option created several buildings for each of these areas, distributing based on the building information options we chose. Conversely, the residential structures are less in the Advanced scenario since we allowed for multifamily options. To understand the difference in the totals, I'll refer to my charts. My numeric dwelling units and floor areas came out roughly the same between Standard. And Advanced, with the difference attributed primarily to the mixed use buildings in the Main Street designation. I was able to achieve more in spatial dwelling units by allowing multifamily structures within my spatial layout. Single family homes were a limitation. Where the biggest difference occurs is in the build out buildings by choosing more advanced options, I was able to refine my building layout and overall potential. This video explored the advanced options for Community Vis build out analysis. This completes to build out tutorial videos. Thank you for watching this Community vis video tutorial. For more video tutorials and community of his resources, please visit our website.